A retrospective review of an epidural blood patch database in a tertiary maternity unit in Greece.

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Background and aims

Accidental Dural puncture (ADP) is often associated with post-dural puncture headache (PDPH) in parturients. Although conventional treatment versus epidural blood patch (EBP) has been extensively reviewed, there is no consensus on the overall patient management.

Methods

We report a retrospective analysis of 116 parturients posted for caesarean section (CS) (108) or vaginal birth (VB) (8) who experienced ADP during Combined Spinal Epidural (CSE) or Epidural anaesthesia, while attending at a tertiary referral obstetric unit between January 2010 and December 2018. Patient records were reviewed for interventions, timing of EBP and outcome.

Results

During that period, we performed 5936 epidurals for VB, 12036 CSEs and 83 Epidurals for CS. The overall rate of ADP was 0.64%, (0.89% CS and 0.13% VB). The majority of ADPs (93) were reported during the identification of epidural space (80.2%), whilst 20 (17.2%) were recognized only after the withdrawal of the pencil-point needle or during the epidural catheter threading (1 - 0.9%). In 2 cases, ADP was reported during local infiltration with the blue-hub (23G) needle. Among 34 parturients who experienced PDPH (29.3%), 13 were classified as having experienced severe PDPH, whereas 20 as having mild. Only 11 patients consented to active treatment with an EBP. All EBPs were performed 48hrs after ADP. In 2 cases, a second EBP is reported due to an unresolved headache. The mean dose of blood injected was 21.72 ml (min 11 ml, max 40 ml). Follow-up was arranged in 100% of EBP patients.

Conclusion

EBP could be the most effective treatment for PDPH.

References

1. Van de Velde M, Schepers R, Berends N, Vandermeersch E, De Buck F. Ten years of experience with accidental dural puncture and post-dural puncture headache in a tertiary obstetric anaesthesia department. Int J Obstet Anesth. 2008 Oct; 17(4): 329-35.
2. Tien JC, Lim MJ, Leong WL, Lew E. Nine-year audit of post-dural puncture headache in a tertiary obstetric hospital in Singapore. Int J Obstet Anesth. 2016 Dec; 28: 34-38.

Demographic data	
Age, years mean (SD)	31,3 (5,4)
Height, cm mean (SD)	163,0 (6,8)
Weight before labour, mean (SD), (kgr)	65,0 (17,0)
Weight on labour, mean (SD),(kgr)	77,0 (17,9)
Gestational age, wks median, (min-max) {25%-75%} ¹	38 (10-41) {36-39}

¹Percentile